

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

Postmaster: If not
deliverable return to
K. C. Livermore
Honeoye Falls, N. Y.
Return postage guar-
anteed.

Miss Livermore

To The Fighting Farmers of 1943

Sec. 562 P. L. & R.
U. S. POSTAGE
PAID
Honeoye Falls, N. Y.
Permit No. 2

**Let's Produce
To Our Limits --
So Fewer Will Perish**

*Bureau of Plant Industry,
Washington, D. C.
D. M. Shoemaker.*

Start With Better Bred Seeds



62,61

BETTER BRED SEEDS

Hybrid sweet corn,
field corn, potato, oat,
cabbage, field pea,
barley, wheat, soy bean,
rye, alfalfa, clover, grass,
other forage crop seeds.



HONEOYE FALLS, N. Y. - FEBRUARY 20, 1943

FARM CHEMICALS

Seed disinfectants,
seed inoculants,
fertilizers, sulphur,
gypsum, lime,
dusts and sprays.
Also drain tile

**LIBRARY
RECEIVED**

★ MAR 11 1943 ★

U. S. Department of Agriculture

Dear Friends:—

We farmers realize fully that victory for the Allied Nations and ultimate peace depend upon maximum food production by American farmers this year, and each year, until order is restored in the world. We know that responsibility for starvation or survival of millions of human beings in Europe and Asia rests upon us. It is clear to us also, that a shortage of food supplies from America would prolong the conflict and sacrifice the lives of more thousands of our boys.

The records show that last season's extra farm production resulted almost entirely from favorable weather, rather than our intentions and efforts. We can conclude only that an unfavorable season in 1943, with no increased effort on our part, would results in disastrously short food production.

Obviously it is the duty and the privilege of each of us to produce to the limits of our resources — our present resources plus those that can be acquired or may be provided. Unplanted acres will produce no harvest, but we can plant with assurance that a rationed and food conscious public will not let any growing crop waste this year.

So the important thing now is to plan carefully and prepare fully to plant all we can, to plant on time, to plant those crops we can handle best, and to plant good seed of test proven high yielding strains. This is our task. Let's do it with a will for Victory and Peace.

Sincerely,
K. C. LIVERMORE

Quaker Hill Hybrid Sweet Corns

They actually yield 25% to 100% more than the old favorites, are much more uniform, have high quality and all of them are resistant to the dread wilt disease. The seed is produced by controlled cross pollination of specially bred strains. The seed costs more, but results justify the cost many times over.

We offer hybrids that ripen at different times, each being one of the best available in its ripening period. One can choose those that best suit his market or can provide a continuous supply from early to late by planting at one time several that will ripen in succession and then following with successive plantings of a late one.

In the brief descriptions given below, the maturity dates are approximate for this section and naturally vary with locality and season. They are comparable with Golden Bantam at 80 days. For more complete descriptions, planting suggestions and directions for controlling corn borer, earworm and smut, ask for our Sweet Corn Circular.

SPANCROSS - 65 days, 19 earlier than Golden Cross, several days ahead of Golden Early Market. Earliest wilt resistant hybrid available. Cold resistant. Prolific yielder of very uniform, attractive, medium size 10 to 12 rowed ears. 1940 winner of "All America" award. Every gardener should plant Spancross for his first picking.

MARCCROSS - 68 days. Earlier than Golden Early Market. Wilt resistant, good yielder, larger 12 rowed ears, better quality, excellent market type. A money maker for commercial growers and a joy maker for home gardeners.

CARMELCROSS - 72 days. Wilt resistant, fine quality, 12 rowed large ears, 12% to 30% more ears than Marccross. In many trials it has proved superior to all others in its maturity class.

LINCOLN - 78 days. Another winner of "All America" award. Ears 12 to 16 rowed, 15% to 25% heavier than Golden Cross and equal or slightly greater in number. Very tender, good flavor, highly attractive appearance. Out sells all competitors.

GOLDEN CROSS BANTAM - 84 days. Wilt resistant, 12 rowed, high yielder, good size, excellent quality. One of the first hybrids and still the best in its maturity period.

SILVER CROSS BANTAM - 84 days. A white counterpart of Golden Cross, yielding nearly 100% more than Country Gentleman and Stowell's Evergreen and tops in sweetness, flavor and tenderness. Apparently wilt resistant.

MAGNAGOLD - 90 days. Wilt resistant, 18 to 22 rowed ears, larger than Golden Cross, heavy yielder, equal quality. Lots of fodder. Best late yellow sweet corn hybrid available yet. Customers report fast selling at premium prices.

GRADES

Seed of the above is offered in four grades and the amounts usually required per acre are:—

HYBRID	LARGE FLAT	MEDIUM FLAT	LARGE ROUND	MEDIUM ROUND
SPANCROSS	11.0 lbs.	7.5 lbs.	12.5 lbs.	8.5 lbs.
MARCCROSS	11.0 lbs.	7.5 lbs.	12.5 lbs.	8.5 lbs.
CARMELCROSS	9.5 lbs.	7.0 lbs.	10.5 lbs.	8.0 lbs.
LINCOLN	9.5 lbs.	7.0 lbs.	10.5 lbs.	8.0 lbs.
GOLDEN CROSS	8.5 lbs.	6.5 lbs.	9.5 lbs.	7.5 lbs.
SILVER CROSS	9.0 lbs.	7.0 lbs.	10.0 lbs.	8.0 lbs.
MAGNAGOLD	9.0 lbs.	7.0 lbs.	10.0 lbs.	8.0 lbs.

PRICES

ALL HYBRIDS, large flat or medium flat kernels,—

Postpaid: ¼ lb. 25c; ½ lb. 30c; 1 lb. 45c; 2 to 19 lbs. 37c per lb.

Transportation Collect: 20 to 99 lbs. 32c; 100 lbs. or more 30c per lb.

Large round kernels are 3c less and medium round kernels 5c less per lb. than above prices.

When ordering more than one hybrid, the price applying to the total quantity may be used for each kind of which 2 lbs. or more are ordered. If less than 2 lbs. of any kind is ordered, it must be figured at the price applying to its own weight.

Family Garden Sweet Corn Assortment

Everybody likes sweet corn. Nothing else smells or tastes so good. It's healthful and nutritious, too. But was there ever a summer when your garden supplied it as long as you wished? Usually, it's feast for a few days, then only memories until next summer. To remedy that was the idea behind our Family Garden Assortment.

Here is a package of assorted hybrid sweet corn seeds, ripening in succession, that provides an average family with an abundance of delicious fresh sweet corn from early summer till fall, and plenty to can or dry for winter. It includes 3 oz. each Spancross, Marccross, Carmelcross, Lincoln, Golden Cross and 12 oz. Magnagold with directions for planting. Lots of enjoyment and real savings on food costs come in this package. Decide now to feast on sweet corn this summer. For health and happiness and — yes, for food economy too, plant our sweet corn assortment. Price \$1.00 postpaid 1000 miles (5th zone) in U. S., \$1.10 beyond and in Canada. Add 20c for enough Buttercup Squash, (page 4) planted in the corn, to supply the average family all winter.

Quaker Hill Certified Seed Potatoes

Seed potato value depends mostly on (1) freedom from disease carried in the tuber, (2) the breeding back of the strain and (3) condition of the seed. The first two cannot be told fully by appearances, yet are most important. The buyer must depend on the certification tag and the word of the seller.

All of the certified lots are from fields reported by the inspectors either free or very nearly free of virus diseases. The not certified lots were grown from certified seed and especially for seed use. Special precautions have been taken to guard against bacterial ring rot and we are sure as can be, that the disease is not present in any of the seed potatoes offered. All lots are backed by years of careful breeding. In most cases the certified lots were grown from seed produced in tuber unit plantings. They are northern grown, well stored, well graded and guaranteed to reach you in satisfactory condition.

NEW VARIETIES

In recent years, many new varieties of potatoes have been developed. On the basis of their performance records in numerous trials, Warba, Chippewa, Katahdin and Sebago deserve recognition in this area. Growers should not be too slow in adopting them.

WARBA - Ten to 14 days earlier than Cobbler. Generally outyields it on both mineral and muck soils. Quality is very good. It resembles Cobbler, but has pink eyes. Mosaic resistant; susceptible to scab, leaf roll, etc.

Warba has everything that Cobbler has and in addition, yields more and is definitely earlier. Better plant Warba for your summer supply and to market, too. Our seed comes from Northern Minnesota.

IRISH COBBLER - For many years the main early potato. Round, white, deep eyed tuber of excellent quality. We offer Prince Edward Island and Maine certified seed of high quality.

CHIPPEWA - Week later than Cobbler, week earlier than Green Mountain and Katahdin, 2 weeks earlier than the Rurals. Beautiful white, flattened potato with few and shallow eyes. Cooks white and firm, not mealy as most people like. Excellent for chipping and French frying. Seems well adapted to all soils and sections of the Northern States. It is resistant to mild mosaic, susceptible to scab like Cobbler, more susceptible than the Rurals. Has made splendid yield records. We offer certified seed from northern Minn., almost 100% disease free, grown on mineral soil.

GREEN MOUNTAIN - Mid-season variety. Fine quality. Requires cool moist climate for best yields. Not recommended for sections where it is not being grown. We have Prince Edward Island certified seed.

KATAHDIN - Matures with Green Mountain or a few days later, a week earlier than Rurals. Fine appearing, white-skinned, round, flattened potato. Quality good but not equal to Green Mountains or Rurals. Resistant to virus diseases, scab susceptible. Sets lightly but develops nearly all No. 1 size potatoes. Sets shallow, needs more covering.

RUSSET RURAL - Deep rooted high yielding late potato that withstands adverse conditions. Normally excellent eating quality but dark skin unattractive to buyers. Scab resistant. Our seed is Michigan certified.

WHITE RURAL - Smooth or White Rurals have same adaptations as Russets but sell better. The seed offered is practically disease free.

SEBAGO - Has proven resistance to blight both early and late and also to yellow dwarf, mild mosaic and scab. A little later than Rurals. Smooth, shallow eyed, white skinned, round tubers. Attractive as Chippewa. Table quality better than Chippewa and Katahdin, we think as good as Mountains. In many tests, yields were generally equal to or better than other varieties except Rurals. Sebago is likely to replace other varieties in late potato producing areas — especially where blight is frequent or spraying slack. We recommend Sebago and offer excellent Maine certified seed.

PONTIAC - A late maturing red potato resembling Bliss Triumph. Hardy, vigorous, very heavy yielding variety. Good quality. Scab susceptible. Salability uncertain.

PRICES

F. O. B. here, bags free, per 100 lbs. "1st" means U. S. 1, 1½" to 12 oz. "Small" means U. S. No. 1, 1½" to 1½". For part sacks, figure amount and add 20c. Ask for special prices on truckloads or car loads.

Per cwt.	Less than 10 bags	10 to 99 bags	100 bags or more
Warba, Minnesota certified, 1st	\$4.30	\$4.20	\$4.10
Cobbler, P. E. I. or Me. cert., 1st or small	\$4.30	\$4.20	\$4.10
Chippewa, Minnesota certified, 1st	\$4.50	\$4.40	\$4.30
Katahdin N. Y. and Me. cert., 1st or small	\$3.70	\$3.60	\$3.50
Katahdin, not certified, 1st	\$3.40	\$3.30	\$3.20
Green Mountain, P. E. I. certified, 1st	\$4.00	\$3.90	\$3.80
Russet Rural, Mich. certified, 1st	\$4.30	\$4.20	\$4.10
Smooth Rural, N. Y. certified, 1st	\$3.70	\$3.60	\$3.50
Sebago, Me. certified, 1st	\$3.70	\$3.60	\$3.50
Pontiac, N. Y. certified, 1st	\$4.20	\$4.10	\$4.00
Pontiac, not certified, 1st	\$3.90	\$3.80	\$3.70

Uncle Sam Wants More Sweet Corn and Potatoes

Oats, Barley, Peas and Mixtures

Too many farmers still believe that short chunky oats weighing 40 lbs, or more per bushel yield best. Consequently thousands of bushels of unadapted oats from the West are machined to these specifications and sold for seed in the Northeastern States. But experiment station tests show that every acre so planted produces \$2. to \$10. less value than it would if planted to any of the test proven varieties described below. Actual performance records and not appearances are the only reliable guides in choosing oat or barley varieties. Their yielding abilities for different localities are known.

The oats and barleys here offered are test proven high yielders for the Northeastern States. Our seed is thoroughly re-cleaned and well graded with modern equipment by experienced operators. It is free from weed seeds and was grown from treated seed. Germination on all lots is 90% or better, mostly from 96% to 100%.

LENROC OAT - Best for the Northeastern States. It has averaged 2 to 5 bushels more than other station developed varieties and usually 5 to 15 bushels more than the attractive Swedish type and Victory oats from the West, of which thousands of bushels annually are sold here under various names.

Lenroc, bred from Cornellian, the leader for nearly twenty years, yields more, has stronger straw, larger, whiter kernels and should replace Cornellian as well as other varieties. It is a tree type oat and usually outyields side oats by 10 to 15 bushels.

Most oat growers in New York and near-by will do best with Lenrocs (in certain cases Uprights) and no better seed is available than that from Quaker Hill Farm.

UPRIGHT OAT - Outstands all others. Safest and most profitable on rich or low land where other varieties might lodge. Many customers report large yields of this oat safely harvested on fields where they had never before grown oats without heavy losses from lodging.

On lighter or poorer soils Upright yields about 5 bushels less than Lenroc. On rich ground Upright is safer and better than Lenroc or any other oat available.

Upright's kernel is white, larger, but percentage of meats is lower than in Lenroc. Its straw is taller as well as much stronger. Upright leads in yield of straw, green feed or oat hay.

If your oats usually lodge, Upright will solve the problem.

ALPHA BARLEY - Two row hybrid, wide adaptation, excellent straw, large kernels, one of the highest yielders in Northeastern States. Ripens with Lenroc oats. Best for mixtures with oats. Best for milk production but not for beer. Stands better after ripening than other kinds. Best for combining. Threshes cleaner. Its beards are barbed but not uncomfortably so. Suffers less from late planting or unfavorable weather.

WISCONSIN 38 BARLEY - Highest yielding, smooth bearded, 6 rowed hybrid, later than Alpha. Straw weaker. Not so good for mixed sowing. Better for beer.

WHITE CANADIAN FIELD PEAS - One of the best in yield of grain and vine growth. Grown in Idaho to escape blight infection. They are 100% disease free. Blight infected seed is unsafe.

GRAIN MIXTURES - We offer Lenroc oats and Alpha barley, with or without field peas, in proper proportions. These high yielders, ripening together, make the cheapest home grown feed.

GREEN FEED OR HAY MIXTURES - Oats and peas make a very nutritious green feed or hay that cattle relish. A patch handy to the lane or pasture is worth a lot when pastures dry up. Our mixture of Upright oats and disease free peas yield considerably more forage than other varieties.

PRICES

F. O. B. here. Bags free.
Oats, both varieties, sacked 3 bu. — \$1.10 per bu.; 30 to 99 bu. \$1.05; 100 bu. or more \$1.00.
Barley, both varieties, sacked 2 bu. — \$1.60 per bu.; 20 to 69 bu. \$1.50; 70 bu. or more \$1.40.
Field Peas — \$4.50 per bu.; 10 to 19 bu. \$4.35; 20 bu. or more \$4.25.
Oats & Barley (40 lb. Lenroc, 60 lb. Alpha) sacked 100 lb. — \$3.40 per bag; 10 bags or more \$3.20.
Peas, Oats & Barley (30 lb. Peas, 32 lb. Lenroc, 48 lb. Alpha) sacked 110 lb. — \$4.95 per bag; 10 bags or more \$4.75.
Peas & Oats (60 lb. Peas, 48 lb. Upright) sacked 108 lb. — \$6.15 per bag; 10 bags or more \$5.95.

Cabbage

All our cabbage seed is treated, with hot water and with Semesan to protect against diseases that might be carried in or on the seed and pre-emergence damping-off. Post-emergence damping off can be prevented with zinc oxide applied to the soil.

To help control insects, plant seed in a windy location. Use calomel to prevent maggots and tobacco dust to prevent flea beetles. Apply before they appear; after is too late. Be prepared to fight cabbage worms with lead arsenate or rotenone, and lice with nicotine dust. We can supply you.

When grown on yellows free soils the resistant strains usually do not yield as well as the corresponding susceptible strains and so should be used only on infected soils.

GOLDEN ACRE - 63 days from setting. Fine type, early strain developed from Copenhagen Market. Smaller heads but more uniform and compact.

COPENHAGEN MARKET - 73 days. A good yielding, fine type, more uniform ripening strain. Preferred for local and shipping markets.

MARION MARKET - Yellows resistant strain of Copenhagen Market.

GLORY OF ENKHUIZEN - 85 days. Heavy yielding strain, large round heads, even ripening. A favorite for sauerkraut.

GLOBE - Yellows resistant strain of Glory.

QUAKER HILL DANISH - 95 days. Usually one of the leaders in experiment station yield trials. Every kernel grown here from selected mature heads. More than 20 years skilled selection has produced superiority in yield, shape, solidity, color and keeping quality.

REED'S RED DANISH - 95 days. Best of all reds. Nearly every plant makes marketable head. Very good size, wonderfully solid, beautiful color. No later than White Danish and yields nearly as well.

PRICES

Postpaid	Per lb			
	Pkt.	oz.	¼ to 1 lb.	5 lb.
Golden Acre .....	.15	\$.40	\$ 5.00	\$ 4.50
Copenhagen Market .....	.15	.40	4.50	4.00
Marion Market .....	.15	.40	5.00	4.50
Glory of Enhuisen .....	.20	.60	6.00	5.50
Globe .....	.20	.60	6.00	5.50
Quaker Hill Danish .....	.40	1.00	10.00	9.50
Reed's Red Danish .....	.40	1.00	10.00	9.50

Field Corn

More hybrids adapted to conditions in our Northeastern States are now available. They have proven definitely their superiority over open pollinated favorites. The higher cost of seed is insignificant compared with their greater returns. Following are our selections of open pollinated and hybrid corns for different conditions here.

Prices are per 56 lb. F.O.B. here. Bags free. For 10 bu. or more deduct 25c per bu. For less than 1 bu. add 15c to the amount.

GRADES

Germinations range from 90% to 98%. Seed is graded,—Large Flat, Medium Flat, Large Round, Medium Round. This permits more accurate planting with less waste of seed and better yields. Corn planters, with the plates usually furnished handle flat kernels better than round but plates for the round kernels are available. Hand planters and grain drills handle both shapes. The different grades produce equally well, provided the seed is properly spaced. Prices above are for large flat or medium flat grades. Prices for large and medium round grades are \$1.00 less for the hybrids and 50c less for the others.

For husking where only the earliest will mature, we offer,—

YATES FLINT - 90 days here. One of the highest yielders of the earliest corns. Ear large, yellow to red, mostly amber, 12 to 16 rowed. Kernels small, ideal for feeding whole to poultry. Stalks 7' to 8'. Per bu. \$3.85.

SHEFFIELD - 90 days here. Best of the earliest 8 row flints. Ears medium size, dark yellow, well filled. Stalks 6' to 7'. Per bu. \$3.85.

Note. The flint corns are susceptible to wilt disease and should not be used where it occurs.

For silage where seasons are comparatively short, over 800' elevation, and for husking where 100 to 110 day corns are safe, generally 500' to 1000' elevation except in northern New York and New England, we offer,—

MAMMOTH YELLOW FLINT - 100 days here. Larger eared, heavier yielding 8 to 10 rowed yellow flint corn with 7' to 9' stalks. Per bu. \$3.00.

CORNELL No. 11 - 100 to 110 days here. Best open pollinated yellow dent corn in this maturity. Averaged 70 bu. shelled in N. Y. tests. Makes silage of highest feeding value. Better than bigger, later corns. Quaker Hill strain is medium early, fine type and surprising yielder. Per bu. \$2.75.

CORNELL 34-53 HYBRID - 100 to 105 days here, 10 days earlier than Cornell 11. Yields 10% to 15% more grain and equal or more silage of higher feeding value than Cornell 11. Yellow ears, 7" to 9", 14 to 16 rows. Stalks 7' to 9'. This hybrid will prove valuable to Northeastern dairy and poultrymen. Supply is very limited. Per bu. \$6.00.

CORNELL 29-3 HYBRID - 110 to 115 days here. In few years has replaced open pollinated corns on thousands of farms. Yields 25% more feed value per acre as silage and 15% to 30% more grain than those replaced. Ears vary but are mostly medium size, dent type with some semi flint, and reddish, yellowish or whitish. Per bu. \$5.00.

For silage in sections under 1000' and for husking under 600' where 130 day corns usually are safe, we offer,—

WEST BRANCH SWEEPSTAKES - 125 to 130 days here. Larger than Cornell 29-3 and can outyield it where seasons are long enough. Ears large, 10" to 14", 12 to 16 rowed, various colors, mostly shades of red. Stalks leafy 9' to 12'. Vigorous grower. Per bu. \$3.00.

LANCASTER SURE CROP - 130 days here. Has been popular husking corn in Eastern Pennsylvania and used extensively for silage near by. Large ears, small cobs, deep kernels. Stalks 10' to 16' with abundant foliage. Being replaced by hybrids. Per bu. \$3.00.

CORNELL 29-5 HYBRID - 125 to 130 days. A new hybrid designed to replace Sweepstakes. Repeated tests prove it more uniform, vigorous and productive. Recommended for silage in Southern New England, Southeastern New York and at low elevations on fertile soils further north. Supply of seed very limited. Per bu. \$6.00.

NEW JERSEY No. 2 and No. 4 HYBRIDS - 130 days or longer. New hybrids developed for husking in Central and Southern Jersey. Outyield Sure Crop and other open pollinated corns there by 20% to 30% and rank high in silage tests in Jersey, Eastern Pennsylvania, Lower Hudson and Connecticut River Valleys and Long Island. Per bu. \$7.50.

Soy Beans

Soy bean production is increasing rapidly in the Northeast. The high protein (30% digestible) and fat (14% digestible) content make soys very valuable to live stock farmers to balance their other home grown feeds and save the increasing cost of purchased feeds.

For grain, plant ½ to 1 bu., according to size, in 28 in. drills and cultivate; or plant about 1½ to 2 bu., with the grain drill or broadcast. Plant shallow, 1" to 2". Use the weeder as soon as the plants are 4 in. or 5 in. high and again in a week, if necessary. For hay or plowing under, plant 2 bushels with the grain drill. For silage, plant 20 pounds with usual amount of corn. Inoculate soy beans with Nitragin Culture S.

The best varieties for the Northeastern States are:—

CAYUGA - Early enough to mature anywhere that corn ripens, 90 to 100 days. Upright growth, 2 to 3 feet. Yields 25 to 35 bushels, small bluish black beans. Best for grain or hay where seasons are short. Not desirable for oil extraction.

SENECA - Another good soy from Cornell. 100 to 110 days. Yellow seed. Taller and better yielder than Cayuga but lodges frequently when planted solid. Row culture at 21" to 28" is recommended. Best soy for most of New York and adjacent areas.

MUKDEN - About 3 days later than Seneca and earlier than Manchu. Limited trials in New York show very good yields, stiff upright plants, pods high enough to avoid much loss in combining. Looks better than Manchu and some think better than Seneca.

MANCHU - About 110 days to maturity. Satisfactory for planting with early silage corn or plowing down.

WILSON - About 120 days to maturity. Occasionally matures grain here, but is recommended primarily for plowing under, because of larger growth. Lateness makes curing for hay difficult.

HABERLANDT - About 125 days to maturity. Cornell tests showed this to be the best soy to plant with such silage corns as Cornell 29-3 and Sweepstakes. Shape of plant and stage of maturity are right for clean harvest and production of maximum feed value.

Earlier maturing soys decrease corn yields by taking more food and water, and increase loss of beans by shelling. Later maturing soys do not produce enough beans to justify the extra costs. It is important to use a soy of the right type and right maturity with silage corn. Haberlandt is best for most of this area.

Be sure to inoculate soys with Nitragin S.

PRICES

F. O. B. here, bags free, per bu., 60 lbs. All varieties except Haberlandt \$3.00 per bu. 10 bus. or more \$2.90 per bu. Haberlandt 40c higher.

Alfalfas

Most profitable forage crop where conditions are favorable. Good stands last four to ten years. Plenty of lime, good drainage, fertile soil, weed elimination, seed inoculation, hardy seed and right variety, plus good judgment, are essential for successful stands. The two types suitable for the Northeastern States are:—

COMMON, Northern grown - Has purple blossoms, grows taller. When soil and season are favorable it yields more but is less hardy and shorter lived than the variegated type. Recommended only for deep, well drained, gravelly or sandy soils with natural supply of lime, where winters are not too severe. Only Northern grown seed from proven hardy strains should be used. This is the kind offered here. Purity and germination are high. Supplies very short. Inoculate with Nitragin A.

VARIEGATED, Northern grown - Has variegated blossoms, purple, blue, white, yellow and blends. Usually shorter, later, hardier and longer lived. Best for less favorable soils and climates which includes most of the North Eastern States. Ontario Variegated, Grimm, Hardigan Cossack and several other named strains are of this type and differ but little. The source is important. We handle seed of high purity and germination from approved sources only. Supplies very short. Inoculate with Nitragin A.

300 lbs. or more ½c less.

F. O. B. here, bags free.	Per bu. 60 lbs.	Per lb.
COMMON, hardy northern	\$28.80	.48
GRIMM, high purity	30.00	.50
GRIMM, certified or registered blue tag	34.80	.58

Clovers

F.O.B. here. Bags free. 300 lbs. or more, ½c lb. less. Less than 10 lbs. add 10c
MEDIUM RED - Month earlier than Mammoth and than Timothy. Smaller than Mammoth, but usually makes second growth for hay or pasture or seed. Seldom survives second season after seeding. We handle only hardy northern grown seed of first quality. Imported seed is not reliable. Per bu. \$19.20; per lb. 32c.

MAMMOTH RED - Larger and later than Medium, also longer lived and generally hardier. Only one cutting a season. Ripens with timothy, red top, etc. We offer northern grown seed of top quality. Per bu. \$18.60; per lb. 31c.

ALSIKE - Smaller, less upright in growth, longer lived than the red clovers. Will grow on soils too wet, dry, acid or poor for red clover. Often used in pasture mixture. Per bu. \$19.20; per lb. 32c.

WHITE BLOSSOM SWEET CLOVER - Hardest, rankest growing of the clovers. Earliest in the spring, latest in the fall. Valuable, first for soil improving, next for temporary pasture, last for hay. Lives only two seasons, but will self seed if allowed. Spring and summer are best times to sow. In spring grains sow two weeks after the grain, so clover won't be too high when grain is harvested. Fall sowing not safe here. Unscarified or unhulled seed may be sown late in the winter on pastures, winter grains, or open ground. Use Nitragin A. Per bu. \$9.00; per lb. 15c.

YELLOW TREFOIL - A smaller legume similar to alfalfa, especially adapted to pastures. Not perennial, but reseeds freely and so persists. Palatable and nutritious. Will grow where white clover will not. Sow 15 to 20 lbs. alone or 1 lb. in pasture mixture. Use Nitragin A. Per bu. \$15.00; per lb. 25c.

WHITE DUTCH - Dwarf type, perennial clover, used for pastures and lawns with Kentucky Blue and other grasses. Requires good supply of lime. See Wild White. Inoculate with Nitragin B. Prices below.

WILD WHITE - Best clover for pastures and lawns. Recommended by Cornell pasture experts and approved in Soil Conservation Program. Hardier and more productive than White Dutch. Flowers less, spreads rapidly, makes denser sward and pasturage richer in protein. Also increases growth of other pasture plants by supplying nitrogen and keeping soil cooler and more moist by the mulching effect of its dense growth. Inoculate with Nitragin B.

In a Cornell test, Kentucky Blue Grass plus Wild White Clover produced five times as much feed as Kentucky Blue Grass alone. Seed only one pound per acre, preferably in Cornell Pasture Mixture, or if no better way, broadcast on established pasture, when ground is honeycombed with frost. Mix the seed with fine sand or other carrier to help sow evenly.

We offer domestic certified Kent Wild White Clover seed. Prices below.

LADINO WHITE CLOVER - A giant type white clover similar to Wild White in spreading habit, palatability and being a perennial, but growing large enough to be used for hay. Recommended in hay seedings where 2nd growth is to be pastured or where the field is to be mowed for a year or two and then pastured for a time. It is used in Cornell General Purpose Mixture, 1 lb. per A. This small seeding produces good yields of pasture or hay several years after Red and Alsike clovers have run out. Ladino yields well on many fields not adapted to alfalfa or wild white clover and deserves wider use as a substitute for them in hay and pasture mixtures. Use Nitragin B. Prices below.

WILD BIRD'S FOOT TREFOIL - Two types of this plant have been discovered in Eastern New York. The broad leaf type grows like alfalfa with a deep feeding taproot and a crown with many shoots; and it equals alfalfa in productivity and feeding value. But unlike alfalfa it can produce on wet and on acid soils and is more winter hardy and longer lived. It is hardier also than any of the commercial strains. This wild Bird's Foot Trefoil is that long sought substitute for alfalfa on the more acid soils of the Northeastern States.

The narrow leaf type grows close to the ground and is better for pasture than for hay. It promises to fill the place of Wild White Clover for pasture mixtures on wet and acid soils.

Early spring seeding is advised and very light covering, ¼" to not over ½". Both types give best results when sown in mixture with supporting plants. For hay, sow 5 lbs. of the broad leaf type with 8 lbs. Timothy or 4 lbs. Red Top. For pasture, sow 4 to 8 lbs. either type with 15 lbs. Ky. Blue, Canada Blue or Orchard Grass or a mixture. Prices below.

Inoculation is necessary. A special strain of bacteria will be furnished with the seed.

PRICES

Per lb.	Bags free.	Postpaid	Not prepaid
		Less 5 lbs.	5 to 19 lbs.
White Dutch Clover		\$.95	\$.85
Kent Wild White Clover, certified		1.40	1.30
Ladino White Clover		1.30	1.20
Wild Bird's Foot Trefoil, broad leaf		1.40	1.30
Wild Bird's Foot Trefoil, narrow leaf		1.40	1.30

Timothy

F.O.B. here. Bags free. 150 lbs. or more ½c per lb. less.
COMMON - Northern grown, of the highest quality obtainable. Purity 99.50% or better. Per bu. \$4.05; per lb. 9c.

CORNELL NO. 1777 TIMOTHY - Best selection out of hundreds tested by Cornell plant breeders. Very uniform, medium height and maturity, very leafy, fine stemmed, retains green color long, rust resistant. Yields 25% to 30% more than ordinary timothy — better quality. Used also in pasture mixture. Per bu. \$11.25; per lb. 25c.

TIMOTHY AND ALSIKE MIXTURE - This natural mixture saves a little on cost. Our mixture contains 22% or more alsike and has low weed content. Per 45 lb. \$5.85; per lb. 13c.

Miscellaneous

Prices F. O. B. here. Bags Free. 100 lbs. or more ½c per lb. less. Less than 10 lbs. any item, add 10c.

KENTUCKY BLUE GRASS - Basis of most good pasture and lawns in the Northeastern States. Ability to spread, fine tender leaves, palatability and winter hardiness are its strong points. Shallow root system and consequent drying up in drought periods is its weakness. Full production is not reached till the third or fourth year. Requires lime and good drainage. Per lb. 24c.

CANADA BLUE GRASS - Smaller, less palatable, poorer yielder than Kentucky, but grows on more acid, wetter and poorer soils, where Kentucky will not grow. Per lb. 35c.

ORCHARD GRASS - Tall, tufted grass, coarse stems, not so well relished by stock. However, it is very early and stands drought well. Per lb. 35c.

RED TOP - Second important hay grass. Not as salable, not as heavy yielder as timothy, but stands wet, acid or poor soils better. Produces full crop hay or pasture first year after seeding. Per lb. 15c.

REED CANARY GRASS - A marshy land crop. Produces large yields in two cuttings, palatable, nutritious hay, on low overflow lands and marshes too wet for other crops. Makes tough sod that will support horses and hay machines where they could not be used before. Or, it can be pastured throughout the season and has carried 3 or 4 head per acre. Plowing and fitting are desirable, but not absolutely necessary. Seed 5 to 7 lbs. broadcast any time, but preferably late fall or early spring. Do not sow on high ground. Per lb. 33c.
SMOOTH BROME GRASS - Winter hardy, drouth resisting perennial. Underground stolons make strong sward. Leafy and especially palatable and nutritious. Sow 14 to 21 lbs. per acre alone, or 8 lbs. with 12 lbs. alfalfa (sow separately) for a hay-pasture mixture, or substitute it for part of the blue grass in a pasture mixture. Per lb. 22c.

DOMESTIC RYE GRASS - Strongly recommended for winter cover crop after vegetables, corn, tobacco, etc. Proved superior to rye, sweet clover and other crops. Seed is cheap, catches well, interferes little with main crop, is satisfactorily winter hardy, makes surprisingly dense root growth but no rank woody spring growth, plows and fits like sod. Sow 20 lbs. per acre at last cultivation in cultivated crops or broadcast over them before or after harvest or sow in disked grain stubble. Covering seed should be done very lightly if at all. Sowing should be done by winter wheat planting time. Early sowing affords fall pasture. If not spring plowed, it may be pastured then or cut for hay or threshed for seed. Per lb. 11c.

SVALOF VICTORIA PERENNIAL RYE GRASS - Bred by Swedish agronomists especially for pasture use and lawns. Makes strong sward and produces heavy crop of fine leaves of excellent feeding value. This strain of rye grass is Cornell's first choice for use in the Cornell Pasture Mixture. Our seed was grown here from imported certified seed. Per lb. 24c.

JAPANESE MILLET - Best of the millets. Very satisfactory for green feed or hay. Planted after corn and up to July 1st, it is ready to feed green or cut for hay in eight weeks. It supplements the pasture or the hay supply. Grows well on light soils. Sow 15 to 35 lbs. Per lb. 6c.

HUNGARIAN MILLET - Can be sown later, to about July 10th, and must be fed with caution, not more than half the roughage. Sow 35 to 45 lbs. per acre. Per lb. 7c.

PROSO MILLET - Grown primarily as catch crop for grain. We offer purple top Turghai, a heavy grain yielder ripening in 60 to 70 days. Can be planted after winter barley or wheat, canning peas or other early harvested crop. Its grain is good for all livestock, excellent for poultry, 17% protein. Sow 25 lbs. per acre. Per lb. 7c.

DWARF ESSEX RAPE - Belongs to cabbage family. Very nutritious. Usually grown for green feed for sheep or hogs or cattle, in rows and cultivated, or broadcast. Plant 3 to 5 lbs. per acre, from May to August. Ready to feed in 8 to 10 weeks. Successive plantings extend the feeding period. Sometimes sown in spring grains and pastured in stubble. If not pastured too closely, the plants renew themselves. Per lb. 16c.

SPRING VETCH - Makes high protein green feed or hay. Sow 80 lbs. per acre at oat planting time. Inoculate with Nitragin C. Per lb. 12c.

HAIRY VETCH - Can be sown fall or spring, usually early fall, with rye, various proportions, 1½ to 2 bushels total. Use Nitragin C. Per lb. 16c.

SUDAN GRASS - The dairymen's friend. Sudan makes pasture, green feed, hay or silage that dairy cattle relish and respond to with milk. Sow from corn planting time to July 1st, 5 to 8 lbs. per acre in rows cultivated, or 20 to 30 lbs. broadcast. Early plantings make two cuttings. Cut for hay shortly after blooming. Seed cost is low, returns high. More dairymen should provide Sudan Grass and avoid the summer slump in milk production. Per lb. 7c.

SORGHUM - Grows as tall as corn. When rowed and cultivated like corn, sow 12 to 15 lbs. per acre. When broadcast, sow 40 lbs. per acre. Relished especially by horses and cattle. Per lb. 6c.

Pasture Seedings

Pasturage is one of the most important crops in the Northeastern States, yet few farmers give it the attention it deserves. Until recently, little effective study of the subject had been made by any of the agricultural colleges in this Country. As a result of research started at Cornell in 1931 by Dr. D. B. Johnstone-Wallace, a very successful program of pasture management for this area has been developed.

At Cornell are pastures so managed. They produce from 2 to 3 tons of dry matter per acre containing from 20% to 30% protein. This is as much dry matter as in a 10 to 16 ton crop of silage and as much protein as in a 3 to 6 ton crop of alfalfa. Such production is definitely profitable and the methods of getting it deserve study by all livestock farmers. Write office of Publications, College of Agr., Ithaca, N. Y. for free copy of bulletin 393 "Pasture Improvement and Management." It explains fertilizing, liming, seed mixtures, method of seeding and grazing management and illustrates results.

Following are Cornell's 1943 pasture seeding recommendations:—

CORNELL SPECIAL PASTURE MIXTURE - Intended for good land, well fertilized, and managed according to recommendations. To be seeded 25 lbs. per acre in April or May without nurse crop. Per lb. 26c; per cwt. \$25.00.
Kentucky Blue Grass 10 lbs. Timothy 6 lbs.
Canada Blue Grass 2 lbs. Yellow Trefoil 1 lb.
Perennial Rye Grass 4 lbs. Wild White Clover 2 lbs.

CORNELL GENERAL PURPOSE MIXTURE - To be used under similar conditions but for combination hay and pasture or pasture only. May be seeded with nurse crop. 22 lbs. per acre. Per lb. 29c; per cwt. \$28.00.
Kentucky Blue Grass 6 lbs. Medium Red Clover 2 lbs.
Timothy 8 lbs. Alsike 1 lb.
Alfalfa 4 lbs. Ladino White Clover 1 lb.

CORNELL UTILITY MIXTURE - For land of lower fertility or not suited to alfalfa. May be used for hay or silage first year or two if desired. 22 lbs. per acre. Per lb. 27c; per cwt. \$26.00.
Kentucky Blue Grass 4 lbs. Mammoth Red Clover 3 lbs.
Canada Blue Grass 3 lbs. Alsike 3 lbs.
Timothy 6 lbs.
Red Top 2 lbs. Ladino White Clover 1 lb.

We offer the above mixtures made up with seeds approved by Cornell, including Kent Wild White Clover and Svalof Victoria Perennial Rye Grass in the first. Mixtures for dry land, wet land, good alfalfa land, poultry ranges and other special situations will be quoted on request.

Squash

BUTTERCUP - Everybody enthuses about its wonderful flavor, sweetness, dryness, smooth texture, rich color and its economical one-family-meal size and insignificant waste. Ripens early, yields heavily and keeps well. Odd appearance handicaps first sales but identifies it for succeeding sales and how they come back for more! Be sure to plant Buttercup for the family, if not for market. About 200 seeds per ounce, about 100 per packet. Prices postpaid: pkt. 20c, oz. 30c, ¼ lb. 60c, lb. \$2.00.

Pop Corn

MINHYBRID 250 - A hybrid of the Japanese Hulless type, a little earlier, yielding 16% more and popping to 29% greater volume, according to Minnesota station tests. Reported wilt susceptible. Postpaid, ¼ lb. 20c; ½ lb. 30c; 1 lb. 45c; 2 to 19 lbs. 40c lb. Not prepaid, 20 lbs. or more 35c lb.

SOUTH AMERICAN YELLOW - Large stalks, ears and kernels. Yellow. Large yielder. Late. Finest popping quality. Most profitable to grow, but requires long season, at least 120 days. Postpaid, ¼ lb. 15c; ½ lb. 20c; 1 lb. 25c; 2 to 19 lbs. 20c lb. Not prepaid, 20 lbs. or more 15c lb.

Spring Wheat

Requires cool climate. Plant early. Oats or barley generally pay better in the Northeastern States. **MARQUIS** - Popular in the West. Has red kernels. Not prepaid: \$2.80 per bu.; 10 bu. or more 10c bu. less.

Buckwheat

Valuable as a substitute where other plantings have missed, also to plow under and for bee pasture.

JAPANESE - Larger plant, larger kernel, larger yield. Requires better ground. Better for cover crop. 3 to 4 pecks per acre.

SILVER HULL - Smaller plant, smaller kernel. Better flour and feed. 2 to 3 pks. per acre. Prices: Both varieties, \$2.25 per bu.; 10 bu. or more 10c less.

DRAIN TILE

Tile draining is the farm owner's best investment. Prices at our yard are, per 1000 twelve inch length: 3 in. \$41.00; 4 in. \$49.00; 6 in. \$91.00; branch tile, 3 in. 25c; 4 in. 35c; 6 in. 45c each. Weights of straight tile are approximately 5.5 lb., 7 lb. and 14.5 lb. each for sizes listed. Other sizes available from factory. Delivered truck load and car load prices quoted on request.

MORE WHEAT WILL BE NEEDED IN 1944

Our special Wheat Circular, ready in August, will describe and quote the test proven best strains for our Northeastern States. Be sure to see this.

PRICE CHANGES

Prices are subject to change without notice. If lower when your order is received, difference will be refunded; if higher you will be notified and may pay difference or change or cancel order.

GUARANTEE

If you are not satisfied with what you receive from us and notify us promptly, we will replace if possible or refund as you prefer. Loss or damage in transit will be adjusted if you have agent note same on his bill. So many conditions beyond our control affect results, we cannot and do not assume any responsibility for the results secured from our seeds or other supplies. Orders are booked with the understanding that changes in transportation rates are for customer's account and that delivery is contingent on circumstances arising from the war or any other circumstances beyond our control.

Please order early. Thanks. Yours for better bred seeds. K. C. LIVERMORE.

Seed Treating Materials

NITRAGIN LEGUME INOCULANTS:—

CULTURE A for alfalfa, sweet clover, yellow trefoil and **CULTURE B** for medium, mammoth, alsike, crimson, Ladino, wild white and white Dutch clovers, ½ bu. size 30c; 1 bu. 50c; 2½ bu. \$1.00.

CULTURE C for vetches, field peas, garden peas and **CULTURE D** for field and garden beans, ½ bu. size 25c; 1 bu. 35c; 12½ bu. \$3.50.

CULTURE S for soy beans, 1 bu. size 30c; 5 bu. 55c; 25 bu. \$2.50.

STANLEY'S CROW REPELLENT - ½ pt. (treats 1 bu. corn) 60c; pt. (treats 2 bu. corn) \$1.00; qt. (treats 4 bu. corn) \$1.75.

SCARE CROW - ½ pt. (treats 1 bu. corn) 40c; pt. 60c; qt. \$1.00.

CERESAN - for oats, barley, wheat, 1 lb. treats 32 bu.; 1 lb. 80c; 4 lb. \$2.70.

SEMESAN JR. - for corn, 1½ oz. per bu.; 1½ oz. 15c; ¾ lb. 56c; 6¼ lb. \$3.75.

SEMESAN - for vegetables and flower seeds and bulbs; 2 oz. 40c; 1 lb. \$2.50; 5 lbs \$11.40.

SEMESAN BEL - for potatoes; 1 lb. per 50 to 80 bu.; 2 oz. 30c; 1 lb. \$1.65; 5 lb. \$7.15; 25 lb. \$33.25.

CORROSIVE SUBLIMATE - For potatoes, cabbage, etc. ¼ lb. \$1.00; 1 - 4 lb. \$2.95 per lb.; 5 lb. up \$2.75 per lb., express collect. Special prices on larger amounts.

YELLOW OXIDE OF MERCURY - for potatoes, 1 lb. treats 100 or more bu.; ½ lb. \$2.20; 1 - 4 lb. \$3.60 per lb.; 5 lb. up \$3.40 per lb.

CALOMEL - for cabbage, turnip, radish, ½ lb. \$2.25; ¾ lb. \$3.20; 1 - 4 lb. \$3.80 per lb.; 5 lbs. up, \$3.60 per lb. Orders for Calomel booked only subject to government release of stock, expected after March, and to basic price change.

RED OXIDE OF COPPER - for peas, spinach, beets, 1 teaspoon per lb., or 2½ lb. per cwt.; ¼ lb. 35c; ½ lb. 50c; 1 lb. 80c; 5 lb. \$3.80. Special prices on larger quantities.

ZINC OXIDE - for seed beds, ½ to 1 oz. per sq. ft.; 1 - 9 lb. 25c per lb.; 10 - 49 lb. 20c per lb., postage paid. Freight collect 50 lb. bags, \$6.00; 100 lb. bags \$10.00.

GRAPHITE - for coating peas to prevent breakage after treating; 2 oz. per bu.; ¼ lb. 25c; ½ lb. 30c; 1 - 4 lb. 35c per lb.; 5 lb. up, 30c per lb., postage paid. Freight collect, 100 lb. bags, \$18.00.

GUM ARABIC POWDER - to make calomel stick to cabbage seed; 1 oz. per lb. seed, 1 oz. 15c; 2 oz. 20c; ¼ lb. 30c; ½ lb. 50c; 1 lb. 85c.

FORMALDEHYDE - for seed treating and soil disinfecting, (40%); 1 lb. can 40c; 5 cans up 35c each. Special prices on large quantities in bulk.

TOBACCO POWDER - to repel flea beetles, squash bugs, etc., or fumigating; 1 to 4 lb. 15c per lb.; 5 to 29 lb., 10c per lb., postage paid; 30 to 99 lb., 5c per lb.; 100 lb. bags, \$4.00 per bag freight collect.

SPERGON - a dust for treating seeds and soils to control fungus and bacterial diseases, 2 to 3 oz. per bu of seed; 2 oz. 45c; 1 lb. \$2.50 postpaid; not prepaid 5 lb. \$9.95; 10 lb. \$18.50.

SULPHUR - for seed potatoes. The easiest way to control scab on potatoes is to scatter 1 to 2 lb. of sulphur over each bushel of seed as it is dumped in the planter hopper. The action of the machine coats the seed fairly well and the surplus runs into the row. Use our seed treating sulphur. Prices f.o.b. here, 5c per lb.; \$4.00 per cwt.; \$70 per T.

SULPHUR - for the soil. When scab conditions are bad, the soil should be treated rather than the seed. The same treatment also controls scab gnat and milleped injury. Apply sulphur only where needed; apply 200 to 800 lb. per acre depending on the severity of the scab or as indicated by soil tests; apply after plowing and mix thoroly at least 4" deep. Use our Free Flow Sulphur. It drills better and is economical. One application lasts years. Prices f.o.b. here. 4½c lb.; \$3.50 per cwt.; \$60.00 per ton. Special prices on ton lots or more delivered from factory.

ORDER FORM

K. C. LIVERMORE, Honeoye Falls, N. Y., Dear Friend:—I wish to order the following:

....., 1943

.....@.....\$.....@.....\$.....
.....@.....\$.....@.....\$.....
.....@.....\$.....@.....\$.....
.....@.....\$.....@.....\$.....
.....@.....\$.....@.....\$.....
.....@.....\$.....@.....\$.....
.....@.....\$.....@.....\$.....
.....@.....\$.....@.....\$.....

If transportation charges to be paid by you, have to be prepaid, please allow for it here. Excess will be returned

TERMS: Cash with order, or 25% with order and balance before shipment or on arrival with collection fees

Total - - - \$.....

added. If balance is to be paid at a bank on delivery, give name and address of bank.

Check or M. O. - - \$.....

Bank P. O. State

Balance - - - \$.....

Ship to (Person) P. O. State Rt. or St.

Freight or express station State Railroad

Shipping instructions Name and address of person ordering, if different from above